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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,889	04/03/2007	Volker Hellwig	095309.57895US	1733
23911 7590 02/02/2009 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER TILLERY, RASHAWN N	
			ART UNIT 2174	PAPER NUMBER
			MAIL DATE 02/02/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/583,889

**Applicant(s)**

HELLWIG ET AL

**Examiner**

RASHAWN TILLERY

**Art Unit**

2174

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-38 is/are pending in the application.
- 4a) Of the above claim(s) 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-21 and 23-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is responsive to the Amendment filed 10/27/2008.
2. Claims 19-38 are pending in this application. Claims 19, 24 and 30 are independent claims. In the instant Amendment, claims 19, 23 and 24 were amended and claim 22 was canceled. This action is made Non-Final.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19-21, 23, 27-29, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuenzner et al ("Kuenzner", US7225413) in view of Kuenzner ("Kuenzner '633 EP 1122633).

Regarding claim 19, Kuenzner discloses, in figure 2, a control system for a motor vehicle comprising:

a manual operating device (see fig 2 where the "rotary push button" is shown), having a plurality of degrees of freedom (see col. 3, lines 8-16 where the "movement of the actuating element [rotary push button]" is discussed) for selecting or activating entries (audio, navigation, off, etc) in a menu structure with a plurality of menu levels

(see fig 2 where the "main menu points" are shown; also see col. 2, line 62 to col. 3, line 7); and

a screen display with a plurality of presentation areas (see fig 2 where the central area of the display screen is shown) which represent the menu structure (see col. 3, lines 17-27 where the display is discussed), and each of which comprises at least one field for presenting one of the entries (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu); wherein

on at least one level of the menu structure in at least one of the presentation areas, at least one first entry is selected, activated or set by an adjusting movement with a first or a second of the plurality of degrees of freedom for the manual operating device (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu with the rotary push button);

the first and second degrees of freedom correspond to an orientation of the at least one first entry in at least one active presentation area on the screen display (see col. 3, lines 8-16 where the "movement of the actuating element" is discussed);

at least one second entry is activated or set after the adjusting movement with the first or second degree of freedom, by subsequently holding the manual operating device (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu);

at least one presentation area which is currently active is exited by an adjusting movement with a third or a fourth degree of freedom for the manual operating device,

the third and the fourth degrees of freedom being at right angles to the orientation of the at least one first entry (see col. 3, lines 39-54 where the "switch-over" is discussed).

Kuenzner does not expressly disclose the at least one first entry is in the form of a line strip including a plurality of lines, with each line representing a selectable subentry of the same type. However, such teaching is well known in the art. For instance, Kuenzner '633 teaches an actuator for controlling a vehicle screen display. In one embodiment, user is capable of activating a "CD" submenu from the selection of an "Audio" main menu. Under the submenu, selectable subentries are presented in the form of a line strip (see fig 3b, where subentries "1 2 3 4 5 6" are shown). It would have been obvious to an artisan at the time of the invention to include Kuenzner '633's teachings in Kuenzner's user interface in an effort to ensure a safe driving experience by reducing user distraction while maneuvering on-vehicle equipment.

Regarding claim 20, Kuenzner discloses the at least one second entry has the same orientation as the at least one first entry (see col. 2, line 62 to col. 3, line 7 where the relative positioning of the "eight points" is discussed).

Regarding claim 21, Kuenzner discloses the at least one second entry represents a detail presentation of the activated or set first entry (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu).

Regarding claim 23, the modified Kuenzner discloses the at least one first entry is set by a cursor which is in the form of a bar and which is positioned on one of the lines using the manual operating means by operating with the first or second degree of freedom (see Kuenzner '633, fig 3c where "3" is highlighted).

Regarding claim 27, Kuenzner discloses the at least one first entry represents a plurality of selectable radio or television stations or music titles or video clips within an audio application or a video application or a television application (see fig 1).

Regarding claim 28, Kuenzner discloses the at least one first entry activates one of a "next entry" function and a "previous entry" function within an audio application, a video application or a television application (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu).

Regarding claim 29, Kuenzner discloses the at least one second entry activates or presents one of a "fast forward" function, a "fast rewind" function and a "station search" function within an audio application or a video application or a television application (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu).

Regarding claim 37, Kuenzner discloses the at least one second entry represents a detail presentation of the activated or set first entry (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu).

Regarding claim 38, the modified Kuenzner teaches the at least one first entry is in the form of a line strip including a plurality of lines, with each line representing a selectable subentry of the same type (see claim 1 above where Kuenzner '633 is discussed).

**5. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable**

**over Kuenzner et al ("Kuenzner", US7225413) in view of Kuenzner ("Kuenzner '203" US 7237203).**

Regarding claim 24, Kuenzner discloses, in figure 2, a control system for a motor vehicle comprising:

a manual operating device (see fig 2 where the "rotary push button" is shown), having a plurality of degrees of freedom (see col. 3, lines 8-16 where the "movement of the actuating element [rotary push button]" is discussed) for selecting or activating entries (audio, navigation, off, etc) in a menu structure with a plurality of menu levels (see fig 2 where the "main menu points" are discussed; also see col. 2, line 62 to col. 3, line 7); and

a screen display with a plurality of presentation areas (see fig 2 where the central area of the display screen is shown) which represent the menu structure (see col. 3, lines 17-27 where the display is discussed), and each of which comprises at least one field for presenting one of the entries (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu); wherein

on at least one level of the menu structure in at least one of the presentation areas, at least one first entry is selected, activated or set by an adjusting movement with a first or a second of the plurality of degrees of freedom for the manual operating device (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu with the rotary push button);

the first and second degrees of freedom correspond to an orientation of the at least one first entry in at least one active presentation area on the screen display (see col. 3, lines 8-16 where the "movement of the actuating element" is discussed);

at least one second entry is activated or set after the adjusting movement with the first or second degree of freedom, by subsequently holding the manual operating device (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu);

at least one presentation area which is currently active is exited by an adjusting movement with a third or a fourth degree of freedom for the manual operating device, the third and the fourth degrees of freedom being at right angles to the orientation of the at least one first entry (see col. 3, lines 39-54 where the "switch-over" is discussed).

Kuenzner does not explicitly disclose the at least one second entry is in the form of a level indicator, the current level being presented by a cursor which is in the form of an alterable bar. However, such features are well known in the art. For instance, Kuenzner '203 teaches a vehicle display screen for displaying information using graphical indicators (see figs 1-3). It would have been obvious to an artisan at the time of the invention to include Kuenzner '203's teachings in Kuenzner's user interface in an effort for user to easily follow displayed information while driving.

Regarding claim 25, the modified Kuenzner teaches the current level is set using the manual operating device by operating with the first and second degree of freedom and subsequently holding the manual operating device (see Kuenzner col. 3, lines 39-54 where the "rotary push button" is discussed).



Regarding claim 26, the modified Kuenzner teaches the level indicates a current position or an elapsed time period within the second entry (see Kuenzner '203 col. 2, lines 60 to col. 3, line 6 where "current fuel consumption" is discussed).

**6. Claims 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuenzner in view of Okonkwo (US 2007/0158448).**

Regarding claim 30, Kuenzner discloses a control system for a motor vehicle, comprising:

a manual operating device (see fig 2 where the "rotary push button" is shown) having a plurality of degrees of freedom (see col. 3, lines 8-16 where the "movement of the actuating element [rotary push button]" is discussed) for selecting or activating entries in a menu structure with a plurality of menu levels (see fig 2 where the "main menu points" are discussed; also see col. 2, line 62 to col. 3, line 7); and

a screen display with a plurality of presentation areas (see fig 2 where the central area of the display screen is shown) for presenting the menu structure, where the presentation areas respectively comprise at least one field for presenting one of the entries (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu); wherein,

at least one entry has at least one associated parameter which is set on at least one level of the menu structure (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu);

at least one first parameter is altered by an adjusting movement of the manual operating device with a first or a second of the plurality of degrees of freedom (see col. 3, lines 8-16 where the "movement of the actuating element" is discussed), where the first or the second degree of freedom corresponds to an orientation of the altered first parameter in the active presentation area; and

an adjusting movement with a fifth degree of freedom for the manual operating device alters a first parameter and exits the active presentation area (see col. 3, lines 17-62 where it is discussed that a menu item is selected and displayed).

Kuenzner does not expressly disclose storing the altered first parameter and exits the active presentation area. However, such features are well known in the art. For instance, Okonkwo teaches a vehicle display screen for accessing and adjusting an audio system (see paragraph [0051] where the adjusting of volume, bass and treble is discussed). In one embodiment of the invention, "tuning buttons, 87 and 88 are used to find the desired station [...and] the station can be saved on any of the station select buttons[.]" See *paragraph [0051]*. It would have been obvious to an artisan at the time of the invention to modify Kuenzner's user interface by including Okonkwo's teachings in an effort to ensure a safe driving experience by reducing user distraction while maneuvering on-vehicle equipment.

Regarding claim 31, the modified Kuenzner does not expressly disclose the at least one first parameter represents a "balance" or "volume" or "bass" or "treble" function within an audio application (see claim 30 above where Okonkwo is discussed).

Regarding claim 32, Kuenzner discloses at least one second parameter is altered by an adjusting movement of the manual operating device with a third or a fourth of the plurality of degrees of freedom, where the third or the fourth degree of freedom corresponds to an orientation of the altered second parameter in the active presentation area (see col. 3, lines 17-62 where the switch-over is discussed); and

the altered second parameter is stored by an adjusting movement of the manual operating device with the fifth degree of freedom, and the active presentation area is exited (see claim 30 above where Okonkwo is discussed).

Claim 33 is similar in scope to claim 31 and is therefore rejected under similar rationale.

Regarding claim 34, Kuenzner discloses the first and the second parameters are altered on the same menu level and in the same presentation area (see fig 2 where the central area of the display screen is shown displaying radio stations upon selecting the audio menu).

**7. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuenzner in view of Kuenzner '633 in further view of Noguchi et al ("Noguchi", US6903652).**

Regarding claim 35, the modified Kuenzner discloses with a vertical arrangement of the at least one entry or of the at least one parameter (see fig 2 where the parameters "antenna, charivari, etc" are arranged vertically) in the active presentation area:

the first degree of freedom is the manual operating device being slid in a positive y direction (see fig 2, "navigation");

the second degree of freedom is the manual operating device being slid in a negative y direction (see fig 2, "adjustment");

the third degree of freedom is the manual operating device being slid in a positive x direction (see fig 2, "air conditioning when parked");

the fourth degree of the freedom is the manual operating device being slid in a negative x direction (see fig 2, "DSP").

The modified Kuenzner does not expressly disclose the fifth degree of freedom is the manual operating device being pressed in a negative z direction in an xyz coordinate system.

However, such a feature is well known in the art. For instance, Noguchi teaches a vehicle display screen for adjusting on-vehicle equipment using a single controller (see fig 6a where the buttons 12a, 12b and 12c are shown; also see col. 3, line 18 to col. 4, line 9). It would have been obvious to an artisan at the time of the invention to modify Kuenzner's user interface by including Noguchi's teachings in an effort for users to ensure a safe driving experience by reducing user distraction while maneuvering on-vehicle equipment.

Regarding claim 36, the modified Kuenzner discloses with a horizontal arrangement of the at least one entry (see fig 2 where the entries "audio, navigation and tv" are arranged horizontally) or of the at least one parameter in the active presentation area:

the first degree of freedom is the manual operating device being slid in a positive y direction (see fig 2, "navigation");

the second degree of freedom is the manual operating device being slid in a negative y direction (see fig 2, "adjustment");

the third degree of freedom is the manual operating device being slid in a positive x direction (see fig 2, "air conditioning when parked");

the fourth degree of the freedom is the manual operating device being slid in a negative x direction (see fig 2, "DSP").

The modified Kuenzner does not expressly disclose the fifth degree of freedom is the manual operating device being pressed in a negative z direction in an xyz coordinate system.

However, such a feature is well known in the art. For instance, Noguchi teaches a vehicle display screen for adjusting on-vehicle equipment using a single controller (see fig 6a where the buttons 12a, 12b and 12c are shown; also see col. 3, line 18 to col. 4, line 9). It would have been obvious to an artisan at the time of the invention to modify Kuenzner's user interface by including Noguchi's teachings in an effort to ensure a safe driving experience by reducing user distraction while maneuvering on-vehicle equipment.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 19, 23, 24-26 and 30 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's arguments filed 10/27/2008 have been fully considered but they are not persuasive.

Regarding Applicant's arguments concerning Kuenzner failing to disclose the limitations of claim 29, the Examiner respectfully disagrees. Examiner opines that Applicant's "functionality" could be interpreted broadly enough to where Kuenzner's teachings would read on it. For example, Applicant's claim language merely requires that a "'station search' function" be presented within an audio application. Similarly, Kuenzner is capable of "searching" through a list of displayed radio stations before making a selection.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RASHAWN TILLERY whose telephone number is 571-272-6480. The examiner can normally be reached on M-F 8:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RNT

/Adam L Basehoar/  
Primary Examiner, Art Unit 2178